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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
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Serial No.: CONT OF 08/776,337

Filed: Concurrently Herewith

For: POLYEPITOPE VACCINES

Group Art Unit: 1644

Examiner: Mary Tung

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PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Please amend the above-identified patent application as follows:

In the claims:

Please delete claims 1-~~30~~ 13 and add the following claims:

R1.126 --~~31~~. 14 A polynucleotide comprising a nucleic acid sequence encoding at least two CTL epitopes, wherein at least two of the epitopes are restricted by the same HLA gene.

All R1.126 amt ~~32~~. 15 The polynucleotide of claim ~~31~~ 14, wherein the sequence encoding the CTL epitopes are contiguous.

R1.126 16. ~~33.~~ The polynucleotide of claim ~~31~~ 14, wherein said polynucleotide encodes two epitopes.

R1.126 17. ~~34.~~ The polynucleotide of claim ~~31~~ 14, wherein said polynucleotide encodes three epitopes.

R1.126 18. ~~35.~~ The polynucleotide of claim ~~31~~ 14, wherein said polynucleotide encodes nine epitopes.

R1.26 19. ~~36.~~ The polynucleotide of claim ~~31~~ 14, wherein said polynucleotide encodes ten epitopes.

R1.126 20. ~~37.~~ The polynucleotide of claim ~~31~~ 14, wherein said polynucleotide encodes CTL epitopes from a plurality of pathogens.

R1.126 21. ~~38.~~ The polynucleotide of claim ~~31~~ 14, further defined as an expression vector.

R1.126 22. ~~39.~~ The polynucleotide of claim ~~38~~ 21, wherein said vector is selected from the group consisting of a viral vector and a virus-like particle (VLP).

R1.126 23. ~~40.~~ The polynucleotide of claim ~~39~~ 22, wherein said viral vector is a vaccinia vector.

R1.126 24. ~~41.~~ The polynucleotide of claim ~~39~~ 22, wherein said viral vector is an avipos virus vector.

R1.126 25. ~~42.~~ The polynucleotide of claim ~~39~~ 22, wherein said vector is a VLP.

R1.126 26. ~~43.~~ The polynucleotide of claim ~~31~~ 14, wherein at least one of said CTL epitopes is derived from a pathogen.

R1.126 27. ~~44.~~ The polynucleotide of claim ~~31~~ 14, wherein said polynucleotide comprises a nucleic acid sequence encoding CTL epitopes derived from a plurality of pathogens.

R1.126 28. ~~45.~~ The polynucleotide of claim ~~43~~ 26, wherein said pathogen is selected from the group consisting of Epstein Barr Virus, Influenza Virus, Cytomegalovirus, Adenovirus and HIV.

R1.126 29. ~~46.~~ The polynucleotide of claim ~~44~~ 27, wherein said pathogen is selected from the group consisting of Epstein Barr Virus, Influenza Virus, Cytomegalovirus, Adenovirus and HIV.

R1.126 30. ~~47.~~ The polynucleotide of claim ~~31~~ 14, wherein at least one of said epitopes is derived from a tumor protein.

R1.126 31. ~~48.~~ The polynucleotide of claim ~~31~~ 14, further comprising a nucleic acid sequence encoding a T helper cell epitope, a B cell epitope, or a toxin.

R1.126 32. ~~49.~~ The polynucleotide of claim ~~31~~ 14, further comprising a nucleic acid sequence encoding a T helper cell epitope.

R1.126 33. ~~50.~~ The polynucleotide of claim ~~31~~ 14, further comprising a nucleic acid sequence encoding a B cell epitope.

R1.126 34. ~~51.~~ The polynucleotide of claim ~~31~~ 14, further comprising a nucleic acid sequence encoding a toxin.

R1.126 35. ~~52.~~ A nucleic acid vaccine comprising a polynucleotide comprising a nucleic acid sequence encoding at least two CTL epitopes from one or more pathogens, wherein at least two of said epitopes are restricted by the same HLA gene, and an acceptable carrier.

R1.126 36. ~~53.~~ A synthetic or recombinant protein comprising at least two CTL epitopes from one or more pathogens, wherein at least two of said epitopes are restricted by the same HLA gene.

R1.126 37. ~~54.~~ The synthetic or recombinant protein of claim ~~53~~ 36, wherein said protein comprises two CTL epitopes.

R1.126 ~~38.~~ ~~55.~~ The synthetic or recombinant protein of claim ~~53~~ 36, wherein said protein comprises three CTL epitopes.

R1.126 ~~39.~~ ~~56.~~ The synthetic or recombinant protein of claim ~~53~~ 36, wherein said protein comprises nine CTL epitopes.

R1.126 ~~40.~~ ~~57.~~ The synthetic or recombinant protein of claim ~~53~~ 36, wherein said protein comprises ten CTL epitopes.

R1.126 ~~41.~~ ~~58.~~ The synthetic or recombinant protein of claim ~~53~~ 36, wherein said protein comprises at least one CTL epitope derived from a pathogen.

A1 ~~R1.126~~ ~~42.~~ ~~59.~~ The synthetic or recombinant protein of claim ~~53~~ 36, wherein said protein comprises CTL epitopes derived from a plurality of pathogens.

R1.126 ~~43.~~ ~~60.~~ The synthetic or recombinant protein of claim ~~58~~ 41, wherein said pathogen is selected from the group consisting of Epstein Barr Virus, Influenza Virus, Cytomegalovirus, Adenovirus and HIV.

R1.126 ~~44.~~ ~~61.~~ The synthetic or recombinant protein of claim ~~59~~ 42, wherein said pathogen is selected from the group consisting of Epstein Barr Virus, Influenza Virus, Cytomegalovirus, Adenovirus and HIV.

R1.126 ~~45.~~ ~~62.~~ The synthetic or recombinant protein of claim ~~53~~ 36, wherein said protein comprises at least one CTL epitopes from a tumor protein.

R1.126 ~~46~~ ~~63.~~ The synthetic or recombinant protein of claim ~~53~~ 36, further comprising a T helper cell epitope, a B cell epitope, or a toxin.

Rl.126 47. ~~64.~~ The synthetic or recombinant protein of claim ~~53~~ 36, further comprising a T helper cell epitope.

Rl.126 48. ~~65.~~ The synthetic or recombinant protein of claim ~~53~~ 36, further comprising a B cell epitope.

Rl.126 49. ~~66.~~ The synthetic or recombinant protein of claim ~~53~~ 36, further comprising a toxin.

Rl.126 50. ~~67.~~ A polyepitope vaccine, the vaccine comprising a synthetic or recombinant protein comprising at least two CTL epitopes, wherein at least two of the epitopes are restricted by the same HLA gene.

A1 Cancel. Rl.126 ~~68.~~ A method of vaccinating a subject against one or more pathogens which method comprises administering to the subject a polynucleotide comprising a nucleic acid sequence encoding at least two CTL epitopes, wherein at least two of the epitopes are restricted by the same HLA gene.

Rl.126 52 ~~69.~~ A method of vaccinating a subject against one or more pathogens which method comprises administering to the subject a synthetic or recombinant protein comprising at least two CTL epitopes, wherein at least two of the epitopes are restricted by the same HLA gene. --

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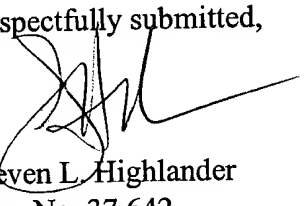
A fee as set forth in 37 C.F.R. §§ 1.16-1.21 in the amount of $1266.00 is enclosed herewith. If an appropriate check has not been enclosed, or if it is insufficient under 37 C.F.R §§ 1.16 to 1.21, the Commissioner is hereby authorized to deduct any necessary fees from Fulbright & Jaworski Deposit Account No. 50-1212/10011879/01973.

Should Examiner Tung have any questions regarding this communication, she is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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